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PATENT ABSTRACTS OF JAPAN

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(71)Applicant : SUMITOMO ELECTRIC IND LTD
TOKYO ELECTRIC POWER CO
INC:THE

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(72)Inventor : SHIBATA TOSHIKAZU
HARA CHIKUSHI
ISHII HIDEO
HONJO SHOICHI

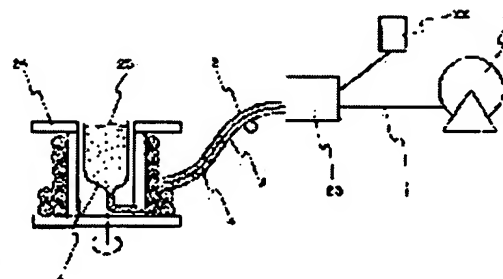
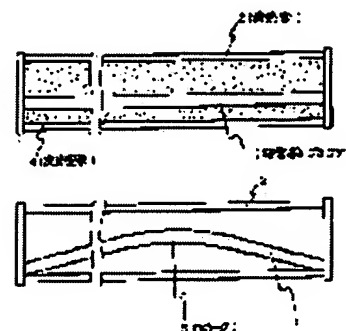
(54) MANUFACTURE OF SUPERCONDUCTING CABLE

(57)Abstract:

PROBLEM TO BE SOLVED: To absorb lengthwise directional thermal contraction of a cable core at cooling time by housing a superconducting cable core in a heat insulating pipe, and snaking it by returning a temperature to a normal temperature by thermally contracting the cable core by supplying liquid nitrogen in the pipe.

SOLUTION: A cable core 1 having an excess length equivalent to thermal contraction is led in a heat insulating pipe 2, and liquid nitrogen 4 is sealed in the heat insulating pipe 2, and the core 1 is cooled, and is thermally contracted. Afterwards, the liquid nitrogen 4 is removed, and a temperature is returned to a normal temperature. An excess length quantity of the cable core necessary for thermal contraction becomes a snake 5

inside of the heat insulating pipe 2 by thermal expansion of the core 1 as a temperature returns to a normal temperature. The core 1 having an excess length of thermal contraction is delivered from a cable core supply drum 21, and the heat insulating pipe 2 is generated outside of it by a heat insulating pipe forming device 23, and the core 1 is housed in the pipe



2, and is wound in order round a drum 24. The liquid nitrogen is supplied in the pipe 2 wound round the drum 24 from a liquid nitrogen supply device 25 connected to an end part of the wound heat insulating pipe 2, and the core 1 is cooled, and is wound round the drum 24.

LEGAL STATUS

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